

Appl. No. : 09/882,370
Filed : June 15, 2001

IN THE CLAIMS

Please amend Claims 1, 3 and 7 to read as set forth below. The changes to Claims 1, 3 and 7 are shown on pages attached hereto after the signature page of this response. The attached pages are captioned ***Version with Markings to Show Modifications Under 37 C.F.R. § 1.121(c)(1)(ii)***.

For the Examiner's convenience, all pending claims are presented below with the status of each claim shown in parentheses.

1. (Amended) A permanent magnet rotor, comprising:
 - a rotor core having a circumferential surface;
 - a plurality of slits formed in the rotor core, each slit having a first end and a second end that extend to and are open to the circumferential surface of the core, each slit having a radially outward side and a radially inward side, each slit having a longitudinal middle portion between the first end and the second end at which a portion of the rotor core forms a bridge across the slit to interconnect a portion of the rotor core on the radially outward side of the slit with a portion of the rotor core on the radially inward portion of the slit; and
 - a permanent magnet embedded in each slit.
2. (As Filed) The permanent magnet rotor of Claim 1, wherein each permanent magnet comprises a bond magnet that fills the slit in a liquid form and is solidified.
3. (Amended) The permanent magnet rotor of Claim 2, wherein each slit has inside surfaces, and wherein the inside surfaces of each slit have projections or recesses formed thereon, which projections or slots are adapted to engage with the bond magnet when the bond magnet is solidified.

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4. (As Filed) The permanent magnet motor of Claim 3, wherein the bridges are inclined with respect to the direction of magnetization of the permanent magnets.

5. (As Filed) The permanent magnet motor of Claim 2, wherein the bridges are inclined with respect to the direction of magnetization of the permanent magnets.

6. (As Filed) The permanent magnet motor of Claim 1, wherein the bridges are inclined with respect to the direction of magnetization of the permanent magnets.

7. (Amended) A permanent magnet rotor, comprising:
a rotor core having a circumferential surface;
a plurality of slits formed in the rotor core, each slit having a respective first end and a respective second end that extend to and are open to the circumferential surface of the rotor core, each slit having inner surfaces, each inner surface having projections or recesses formed thereon, each slit having a respective radially outward portion of the rotor core on one side of the slit and having a respective radially inward portion of the rotor core on an opposite side of the slit; and
a permanent magnet embedded in each slit by filling each slit with bond magnet that solidifies, the bond magnet engaging the projections or recesses when solidified to interconnect the respective radially outward portion of the rotor core on the one side of the slit with the respective radially inward portion of the rotor core on the opposite side of the slit.

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8. (As Filed) A permanent magnet rotor, comprising:
 - a rotor core having a circumferential surface;
 - a plurality of slits formed in the rotor core, each slit having a radially outward side and a radially inward side, each slit having a longitudinal middle portion at which a portion of the rotor core forms a bridge across the slit to interconnect a portion of the rotor core on the radially outward side of the slit with a portion of the rotor core on the radially inward portion of the slit, the bridge inclined with respect to a magnetization direction; and
 - a permanent magnet embedded in each slit and magnetized in the magnetization direction.
9. (Previously Canceled)
10. (Previously Canceled)
11. (Previously Canceled)